



Febrile seizure following cardiopulmonary bypass with *Ascaris Lumbricoides* infection



Kar-Mei Chan, MD; Robert Hill, MD; David J. Karera, MD; Kemper Ruth, MD
New York Medical College at St. Joseph's University Medical Center; Paterson, NJ
Department of Anesthesiology

Introduction

We report a case of a 4-year old Filipino child who was diagnosed with a large, non-obstructive VSD with bidirectional shunting at one month of age.

Case Report

After uneventful induction patient was placed on cardiopulmonary bypass (CPB) for 2hrs 39min.

Following CPB, the patient's temperature was 37.3° c. During emergence the temperature rose to 38.9° c with decreased pulmonary compliance. After unsuccessful suctioning, patient was extubated and re-intubated.

A large mucous plug was found upon inspection of the original ETT (figure 1). The temperature peaked at 41.0° C, and the patient began to have diffuse bilateral tremors without muscle rigidity, along with an increase in heart rate and EtCO₂. Cessation of the seizure-like activity occurred after boluses of propofol and midazolam

Case Report

Stomach irrigated with cold saline and acetaminophen given. Urine sample was sent to the lab for myoglobinuria.

The patient remained intubated and sedated, and brought to the PICU. POD1 the patient was extubated and immediately expectorated a worm (Figure 2). Upon learning from the mother that the patient received treatment for *Ascaris* in the past, labs were reviewed and significant eosinophilia consistent with *Ascaris* infection noted. Stool samples confirmed the diagnosis.

Helminths, stress from general anesthesia and CPB led to an inflammatory response in this patient. It is suspected the release of inflammatory mediators triggered a febrile seizure in this patient.



figure 1



figure 2

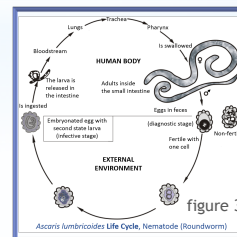


figure 3

Discussion

Ascaris Lumbricoides is a systemic infection resulting from ingestion of larvae from soil in endemic regions. The worms reside not only in the GI tract, but also in lungs and brain following infestation (figure 3). Ascariasis is found in tropical regions, with the greatest populations in SE Asia.

In the current global landscape, care must be taken to familiarize practitioners with potential parasitic infestations in patients presenting with eosinophilia. Patients hailing from endemic regions warrant further preoperative workup prior to surgery.

References

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Figure 3: <https://commons.wikimedia.org/w/index.php?curid=36876123>